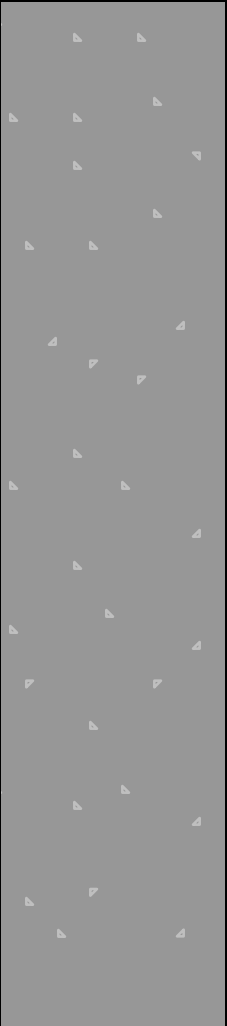





3rd International Conference on Language Documentation & Conservation
University of Hawaii, February 28- March 3, 2013



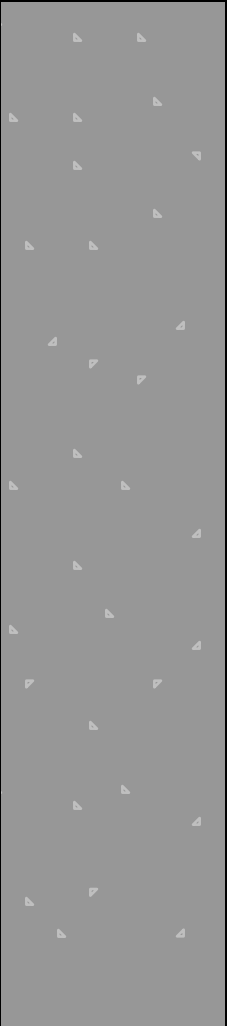
*Comparing Mixean orthographies: Is
there hope
for a unified writing system?*



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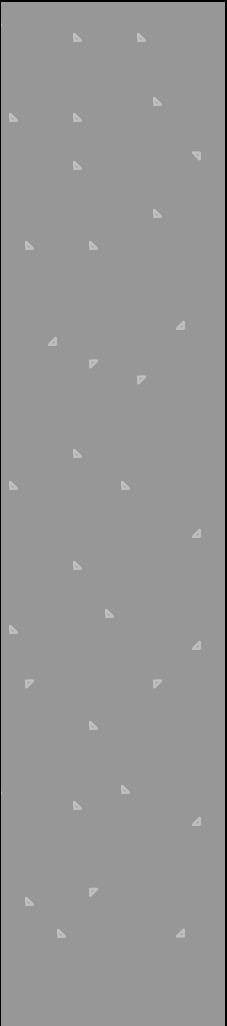


Introduction

- 
- ◆ Mixean languages & dialects are spoken in Oaxaca, Mexico
 - ◆ 290 communities (each speaks its own variety; many are mutually unintelligible)
 - ◆ Linguistic documentation is sparse
=> prevents a precise division into dialectal & linguistic groupings
=> each community retains its linguistic individuality



Introduction

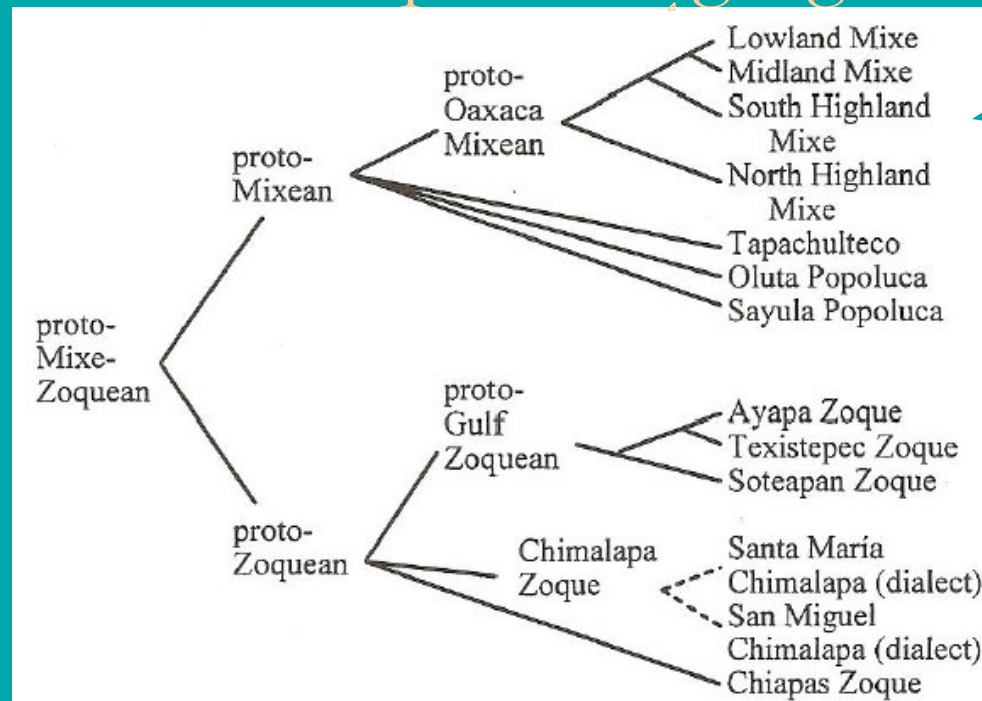
- 
- ◆ Linguistic individuality is reflected in Mixean orthographies
 - ◆ This talk
 - Mixean language family & language documentation
 - History of orthographies in the region & challenges in Mixean orthography design
 - Case study: Comparing 10 orthographies
 - Discussion & Conclusions

Mixean languages

- ◆ Political division:
 - 290 villages; 19 municipalities (Torres Cisneros 1997)
- ◆ Geographic division:
 - lowlands, midlands, highlands
- ◆ Mixean language family
 - INEA (1994, 1997): Division in Lowland, Midland, and Highland Mixe
 - Wichmann (1995): Further division into North and South Highland Mixe
 - Ethnologue: Division into Eastern, Veracruz (not included above), and Western Mixe

Mixean languages

◆ Mixean-Zoquean language family



Oaxaca
Mixean
orthographies
compared

From Wichmann 1995

Mixean languages

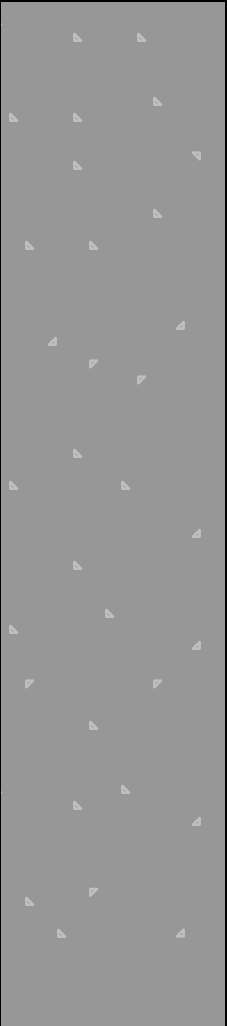
- ◆ Oaxaca Mixean language documentation
 - Only a handful of dictionaries and grammars

| Dialect | Language | Source | Year | Type |
|----------------|----------------|---------------------|------|------------------|
| SJ El Paraíso | Lowland | Van Haitsma | 1976 | Grammar |
| Coatlán | Lowland | Hoogshagen | 1997 | Dictionary |
| Chuxnabán | Midland | Jany | 2010 | Wordlist |
| Chuxnabán | Midland | Gregorio Cirilo | 2005 | Wordlist |
| Juquila | Midland | De la Grasserie | 1730 | Grammar (sketch) |
| Totontepec | North Highland | Schoenhals | 1982 | Dictionary |
| Tlahuitoltepec | South Highland | Ruiz de Bravo Ahuja | 1980 | Grammar (sketch) |
| Ayutla | South Highland | Romero-Méndez | 2008 | Grammar |

- Various articles

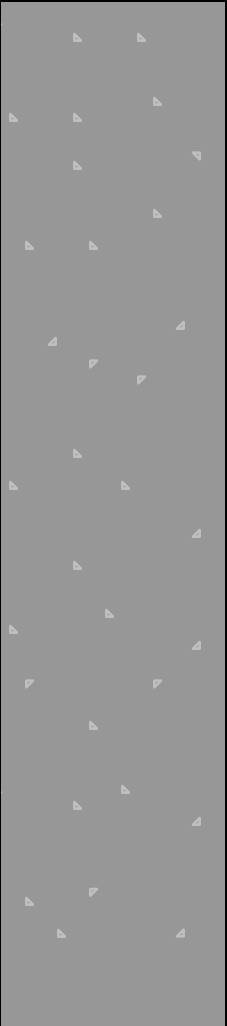


Mixean orthography design

- 
- ◆ Each Mixean variety, if documented, established its own orthography (Jany 2010)
 - ◆ Efforts to create a unified writing system showed limited success (Suslak 2003)
 - ◆ 1st attempt to develop Mixean orthography by Dominican friar in 1733 (Suslak 2003)
 - ◆ 1950s/60s SIL documented several Mixean languages developing unique orthographies for each variety (Benton 1999)

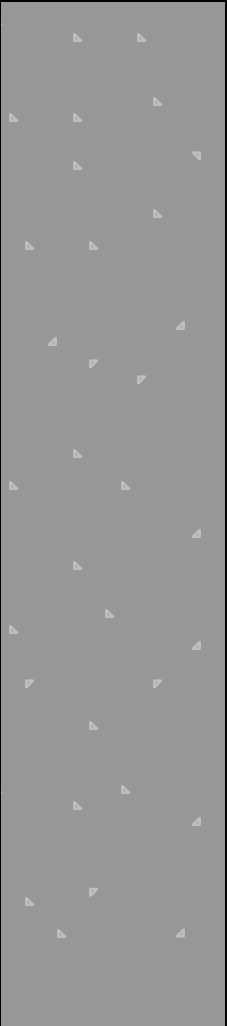



Mixean orthography design

- 
- ◆ Acunzo (1991) & others claimed that different orthographies were introduced to linguistically & socially fragment the communities
 - ◆ As a reaction, the idea of a unified Mixean orthography was proposed at a regional summit in 1979 (Suslak 2003)
 - ◆ A local task force was created, but was faced with great linguistic diversity, lack of resources, and local politics (Suslak 2003)



Mixean orthography design

- 
- ◆ As a result, initially the unified Mixean orthography was not successful
 - ◆ Since 2005: (Reyes Gómez 2005)
 - a unified orthography has received more support
 - its implementation has been somewhat successful (BICAP)
 - it included a series of local workshops to train teachers and community members
- 

Mixean orthography design

◆ My work (since 2006):

- Chuxnabán Mixe (Midland)
- Spoken by 900 people
- Orthography developed in 2008 with help of local youth as determined by village officials
- Chuxnabán Mixe Orthography (Ch in Tables)
 - ◆ Phonemic orientation
 - ◆ Maximum ease of learning
 - ◆ Local acceptability
 - ◆ Ease of use with computers and new media

Mixean languages

San Juan Bosco Chuxnabán



Mixean languages

San Juan Bosco Chuxnabán



Mixean orthography design

◆ Mixean phonemes

- Consonant phonemes stable across varieties

Consonant phonemes: p, t, k, ʔ, m, n, ɲ, ts, tʃ, h, w, j

- 6-9 vowel qualities; great interdialectal variation

Vowel phonemes : i, ʏ, ĩ, u, e, ø, o, æ, a

◆ Challenges in Mixean orthography design

- (1) Using Spanish spelling conventions
- (2) Representing vowel qualities & laryngeal features
- (3) Suprasegmental palatalization

Mixean orthography design

- ◆ Spanish spelling may be applied for
 - **Mixean allophones /b, d, g/** which are phonemes in Spanish
Example: *ankëëxp* / *angëëxp* ‘above’
 - **Grafeme <j>** for the glottal fricative /h/, since initial <h> is not pronounced in Spanish
Example: *joon* / *hoon* ‘bird’
 - **Phoneme /k/** as <c, qu, k> in Spanish
Ex. *kaanëej* / *caanëej* ‘salt water’
keejkypaajk / *queejkypaajk* ‘humerus’
kuunëëx / *cuunëëx* ‘daughter-in-law’

Mixean orthography design

- ◆ (2) Vowel qualities & laryngeal features
 - At least one vowel not on standard keyboards
 - Could be represented using IPA symbols or dieresis as in <ä, ë, ï, ö, ü>
 - But choice between <ë> and <ï> for [ɐ] or [ə] or between ö and ü for [ʊ] not obvious
 - Laryngeal vowel features: glottalization and aspiration in vowel nuclei: V', VV', V'V, Vh, VVh => apostrophe or IPA for glottalization => <h> or <j> or superscript h for aspiration

Mixean orthography design

◆ (3) Suprasegmental palatalization

- Morpheme or phoneme induced phonological process affecting entire consonant clusters & adjacent vowels
- Perceived as onglide & offglide

tëy ‘truth’ + *kaapxp* ‘to speak’ -> *tëykyaapxp* [tʲijˈgja:pʂp] ‘tell the truth’

- Changes position of affected alveolar & velar consonants toward the palatal region, most evident in t/ts => **tʃ** (= phoneme in Spanish)

Case study

◆ Comparison of 10 existing orthographies

Table 10-1: Orthographies compared

| Dialect | Language | Source | Year | Code* |
|---------------------|----------------|--------------------------|------|-------|
| Chuxnabán | Midland | Jany | 2010 | Ch |
| Chuxnabán2 | Midland | Gregorio Cirilo | 2005 | Ch2 |
| San José El Paraíso | Lowland | SIL; Van Haitsma | 1976 | SJ |
| Coatlán | Lowland | SIL; Hoogshagen | 1997 | Coa |
| Totontepec | North Highland | SIL; Schoenhals | 1982 | Tot |
| Tlahuitoltepec | South Highland | SIL; Ruiz de Bravo Ahuja | 1980 | Tl |
| Ayutla | South Highland | Romero-Méndez | 2008 | Ay |
| All | All | Uniform; INEA | 1997 | Inea |
| All | All | Uniform; Reyes | 2005 | Rey |
| Juquila | Midland | De la Grasserie 1898 | 1730 | Qui |

* Code used in Tables 10-2, 10-3, and 10-4

Case study

- ◆ Results: Divergence in four areas
 - (1) Adoption of certain allophonic variations
 - (2) Representations of /k/ and /h/ in regards to Spanish spelling conventions
 - (3) Symbols for less commonly found vowels
 - (4) Suprasegmental palatalization
- ◆ Variation among SIL developed orthographies (SJ, Coa, Tot, Tla)
- ◆ Tables also include IPA symbols (IPA) and Spanish spelling conventions (Spa)

Case study

- ◆ Results: (1) Allophonic variations; Ex. [b,d,g]
 - Represented in Ch2, SJ, Coa, Qui
- ◆ Results: (2) Spanish spelling for /k/, /h/, /tS/
 - /k/: Coa, Tot, Qui
 - /h/: Ch, Ch2, Coa, Tot, Ay, INEA, Rey, Qui
 - /tS/: Ch, Ch2, Coa, Tot, Qui
- ◆ Results: (3) Vowel qualities
 - Dieresis: Ch, Ay, INEA, Rey
 - Underlining: Ch2, Tot
 - IPA Symbols: SJ, Tla

Case study

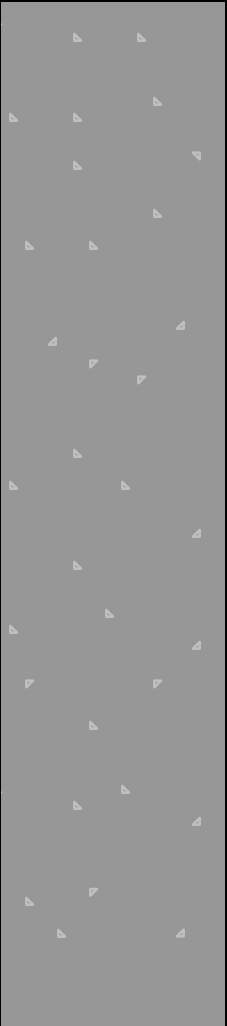
- ◆ Results: (4) Suprasegmental Palatalization
 - Spanish <ñ>, <ch>: (Ch), Ch2, (Tot), (Qui)
 - Consonant + y: Ch, Ch2, Coa, Tot, Tla, Ay, INEA, Rey
 - Tilde for all consonants: SJ
 - All only represent offglide (except Coa)
- ◆ Uniform orthographies (INEA, Rey) are almost identical
 - Both avoid representing allophones
 - Both consistently use <y> for palatalization
 - Both use <j> for glottal fricative [h]

Case study

- ◆ Uniform orthographies (INEA, Rey)
 - Both use apostrophe for glottalization
 - Both use dieresis for additional vowels
 - ◆ But INEA uses both <ë> and <ï> while Rey only uses <ë> for the high central vowel
 - Show consistency by being phonemic & by preferring symbols easily available on keyboards
 - ◆ Help learnability of the orthography
 - ◆ Contribute to its ease of use,
 - ◆ Ultimately contribute to its widespread use

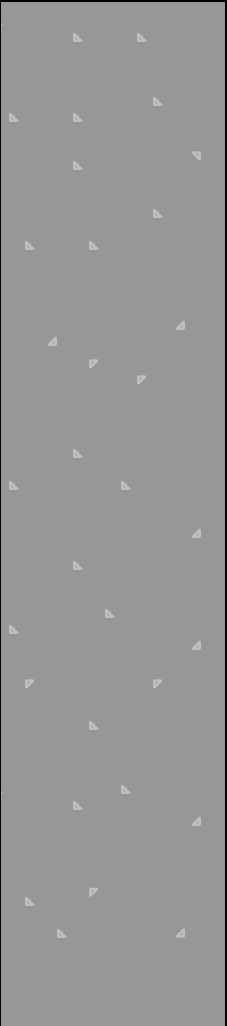



Conclusions

- 
- ◆ Difficult to design a spelling system in a linguistically & dialectally diverse and understudied region
 - ◆ Mixean communities generally favor Spanish spelling conventions & prefer dialectal particularity over multidialectal uniformity
 - ◆ This work highlights the complexity of orthography design in a region with limited intellectual and economic resources to unify local communities and to ensure widespread impact



Conclusions

- 
- ◆ Social, political, and cultural acceptability represents a key factor in the sustainability of an orthography (Sebba 2007)
 - ◆ This ultimately contributes to the success or failure of language documentation and revitalization
- 



Dios kujuuuyöp!